IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Attorney Docket 15467US02

In the Application of: Thangaraj	)	Electronically Filed
U.S. Serial No.: 10/816,724	)	
Filed: 4/1/04	)	
Examiner: Holder	)	
Group Art Unit: 2601	)	
Confirmation No: 1026	)	

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

Sir:

This is an appeal from the Office Action made Final mailed August 14, 2009. A Notice of Appeal, Request for Pre-Appeal Conference, and Pre-Appeal Brief were filed on November 16, 2009. Appellants were advised to proceed with this appeal on March 16, 2010.

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I. REAL PARTY IN INTEREST

Broadcom Corporation, a corporation having a place of business at 5300 California Drive, Irvine California 92617, has acquired the entire right, title, and interest in and to the invention, the application, and any and all patents to be obtained therefore as set forth in the assignment recorded 6/28/2004 at Reel/Frame 014791/0717.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

III. STATUS OF THE CLAIMS

Claims 1-4, 6, 7, 10-15, 19-22, 24, 25, and 28 were rejected under 35 U.S.C. 103 as obvious from U.S. Patent 5,815,206 to Malladi (Malladi) in view Sugiyama (2003/0009722).

Claims 8, 9, 16-18, and 26-27 were rejected under 35 U.S.C. 103 as aobvious from Malladi in view of Sugiyama, and further in view of U.S. Patent 7,096,481 to Forecast (Forecast).

Claims 1-4, 6-22, and 24-28 are appealed.

IV. STATUS OF AMENDMENTS

There are no amendments pending in the present application.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Claim 1 is directed to a method for decoding video data, said method comprising:

writing one or more start codes to a start code table (Specification, p. 10, line 27 – p. 11, line 2, Figure 2, start code table); and

writing presentation time information to the start code table (Specification, p. 11, lines 13-17; Figure 3B, Bytes 7-11); and

wherein the start code table comprises a plurality of data words (Specification, p. 11, lines 2-4) and wherein writing one or more start codes further comprises writing a plurality of start codes to a particular one of the plurality of data words in the start code table (Specification, p. 12, Line 26 – p. 13, Line 3, Figure 3D, Bytes 13, 11, 9, 7, 5, 3, and 1).

Claim 10 is directed to a circuit for decoding video data, said circuit comprising:

a start code table for storing start codes (Specification, p. 10, line 27 – p. 11, line 2, Figure 2, start code table), the start code table comprising a plurality of data words (Specification, p. 11, lines 13-17); and

a video transport processor (Specification p. 10, Lines 18-20) for writing a plurality of start codes to a particular data word in the start code table (Specification, p. 12, Line 26 – p. 13, Line 3, Figure 3D, Bytes 13, 11, 9, 7, 5, 3, and 1).

Claim 19 is directed to an article of manufacture comprising a computer readable medium , said machine readable medium storing a plurality of executable

instructions (Specification at 21, Lines 29-31), said plurality of executable instructions for:

writing one or more start codes to a start code table (Specification, p. 10, line 27 – p. 11, line 2, Figure 2, start code table); and

writing presentation time information to the start code table (Specification, p. 11, lines 13-17, Figure 3B, bytes 11-7);

wherein the start code table comprises a plurality of data words (Specification, p. 11, lines 2-4) and wherein writing one or more start codes further comprises writing a plurality of start codes to a particular one of the plurality of data words in the start code table (Specification, p. 12, Line 26 – p. 13, Line 3; Figure 3D 13, 11, 9, 7, 5, 3, and 1).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1-4, 6-22, and 24-28, are obvious under 35 U.S.C. 103(a)?

VII. ARGUMENT: CLAIMS 1, 10, AND 19 ARE NOT OBVIOUS FROM MALLADI AND SUGIYAMA

Claim 1 is copied below:

> A method for decoding video data, said method comprising:
>
> writing one or more start codes to a start code table; and
>
> writing presentation time information to the start code table; and
>
> wherein the start code table comprises a plurality of data words and wherein writing one

or more start codes further comprises *writing a plurality of start codes to a particular one of the plurality of data words* in the start code table.

Claims 1, 10, and 19 were rejected under 35 U.S.C. § 103(a) as being obvious from the combination of Malladi in view of Sugiyama. Claims 1, 10, and 19 recite, among other limitations, "writing a *plurality* of start codes to a particular *one* of the plurality of data words in the start code table".

By way of example, and not limitation, Figure 3D (copied below) is an exemplary particular data word having written therein, a plurality start codes (see bytes 11, 9. 7, 5, 3, 1):

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Byte	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Data	Code 0	Code 1	SC0 Value	Byte offset0	SC1 Value	Byte offset1	SC2 Value	Byte offset 2	SC3 Value	Byte offset 3	SC4 Value	Byte offset 4	SC5 Value	Byte offset 5	SC6 Value	Byte offset 6

Specification, Figure 3D

Examiner has indicated that Malladi teaches, "writing a plurality of start codes to a particular data word [col. 15 lines 14-66; col. 17, lines 21-55 – writes the start code to the data it represents]". Office Action at 2.

Appellant respectfully submits that the foregoing finding is in error. Although Malladi teaches that "The PES header is then stored in a start code table 408", there is no teaching of "writing a plurality of start codes to a particular data word". First even if the PES header contained a plurality of start codes, which applicants do

not admit, there is no teaching that the PES header is written to one data word, e.g., "a particular data word". For example, Malladi makes not statement regarding the width the data words as compared to the PES header.

Accordingly, for at least this reason, Appellant respectfully requests that the rejection to claims 1 10, and 19, as well as to dependent claims 2-4, 6-9, 11-18, 20-22, and 24-28 be REVERSED.

VIII. ARGUMENT: THE REJECTION TO CLAIMS 6, 11, AND 24 UNDER 35 U.S.C. 103(A) SHOULD BE REVERSED

Claim 6 depends on claim 1 and both are copied below:

> 1. A method for decoding video data, said method comprising:
>
> writing one or more start codes to a start code table; and
>
> writing presentation time information to the start code table; and
>
> wherein the start code table comprises a plurality of data words and wherein writing one or more start codes further comprises writing a plurality of start codes to a particular one of the plurality of data words in the start code table.
>
> 6. The method of claim 1, wherein **the plurality of start codes** comprises a slice start code and a non-slice start code.

Claim 6 recites, among other limitations, "wherein the plurality of start codes comprises a slice start code and a non-slice start code."

Appellant respectfully submits that the foregoing finding is in error. it is noted that "the plurality of

start codes" takes antecedent basis from claim 1, "a plurality of start codes". In claim 1, "a plurality of start codes" are written "to a particular one of the plurality of data words".

Examiner has indicated that the foregoing are taught at Malladi, col. 10, lines 63-67 and col. 11, lines 3-9. Although Malladi teaches "This event is noted in the bit stream by a start code for the next slice", clearly the slice code is not written to the "particular one of the plurality of data" words if it is "in the bitstream". Moreover, there is no teaching in Malladi that the "start code for the next slice" is written in the same particular word as any non-slice code or the PES header.

The response in the Final Office Action merely states that "Malladi discloses both a start code for slice and a picture (non-slice) [col. 8, lines 15-42; col. 10, lines 63-67; col. 11 lines 3-9] The information regarding the start codes for both the picture and slices are contained within the header which are all [a part] of the bit stream which is processed and the information is written to the start code table and memory included there in the data words."

Appellant respectfully submits that the foregoing finding is in error. Although Malladi discloses a start code for a picture, Malladi does not even teach writing the picture start code to the start code table. Col. 8, lines 24-31, steps 116-118. Much less, this does not establish that the picture start code and the slice start code are written to the *same* data word.

Accordingly, Assignee respectfully requests that Examiner withdraw the rejection to claim 6, 11, and 24.

IX. ARGUMENT – THE REJECTION TO CLAIMS 7 UNDER 35 U.S.C. 103(A) SHOULD BE REVERSED

Claim 7 is dependent on claim 1, and both are copied below:

> 1. A method for decoding video data, said method comprising:
>
> writing one or more start codes to a start code table; and
>
> writing presentation time information to the start code table; and
>
> wherein the start code table comprises a plurality of data words and wherein writing one or more start codes further comprises writing a plurality of start codes to a particular one of the plurality of data words in the start code table.
>
> 7. The method of claim 1, further comprising:
>
> writing a command to the start code table.

Claim 7 recites, among other limitations, "writing a command to the start code table". Examiner has indicated that "Malladi – Fig. 4; communicates with start code table writing commands; col. 15, lines 31-53; col. 17 lines 21-41 (emphasis lines 27-29)".

Appellant respectfully submits that the foregoing finding is in error. Although Figure 4 (shown below) shows a start code table 408, it is first noted that none of the units communicating with Start Code Table 408, Bus Interface Unit 410, Start Code Detection 404, or Buffer 406, receive the bitstream as inputs, or are described as writing *commands* to the start code table 408. Moreover,

col. 15, lines 31-53 and col. 17, lines 21-41 do not teach any commands, including lines 27-29.

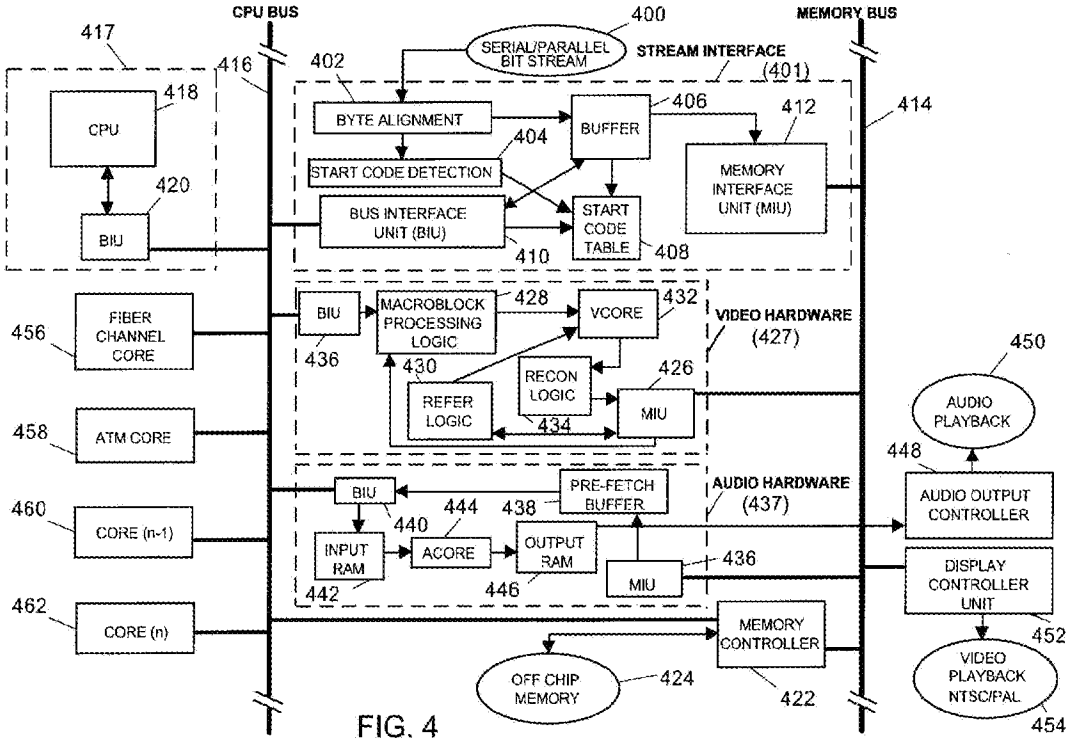

FIG. 4

Accordingly, Appellant respectfully submits that the rejection to claim 7, 17, and 25, as well as to dependent claims 8, 9, 18, 19, 26, and 27 should be REVERSED.

CONCLUSION

For the foregoing reasons, claims 1-4, 6-22, and 24-28 are distinguishable over the prior art of record. Reversal of the Examiner's rejection and issuance of a patent on the application are therefore requested.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Account No. 13-0017.

Dated: July 16, 2010

Respectfully submitted,

/Mirut Dalal/

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CLAIMS APPENDIX

1. A method for decoding video data, said method comprising:

writing one or more start codes to a start code table; and

writing presentation time information to the start code table; and

wherein the start code table comprises a plurality of data words and wherein writing one or more start codes further comprises writing a plurality of start codes to a particular one of the plurality of data words in the start code table.

2. The method of claim 1, wherein the presentation time information comprises a presentation time stamp.

3. The method of claim 1, further comprising writing decoding time information to the start code table.

4. The method of claim 3, wherein the decoding time information comprises a decoding time stamp.

5. (Cancelled).

6. The method of claim 1, wherein the plurality of start codes comprises a slice start code and a non-slice start code.

7. The method of claim 1, further comprising:

writing a command to the start code table.

8. The method of claim 7, further comprising:

writing a reference clock offset to the start code table.

9. The method of claim 8, wherein the command and the reference clock offset are written to another particular one of the plurality of data words.

10. A circuit for decoding video data, said circuit comprising:

a start code table for storing start codes, the start code table comprising a plurality of data words; and

a video transport processor for writing a plurality of start codes to a particular data word in the start code table.

11. The circuit of claim 10, wherein the plurality of start codes comprises a slice start code and a non-slice start code.

12. The circuit of claim 10, wherein the video transport processor writes presentation time information to the start code table.

13. The circuit of claim 12, wherein the presentation time information comprises a presentation time stamp.

14. The circuit of claim 10, wherein the video transport processor writes decoding time information to the start code table.

15. The circuit of claim 14, wherein the decoding time information comprises a decoding time stamp.

16. The circuit of claim 10, wherein the video transport processor writes a reference clock offset to the start code table.

17. The circuit of claim 16, wherein the video transport processor writes a command to the start code table.

18. The circuit of claim 17, wherein the command and the reference clock offset are written to another particular one of the plurality of data words.

19. An article of manufacture comprising a computer readable medium, said machine readable medium storing a plurality of executable instructions, said plurality of executable instructions for:

writing one or more start codes to a start code table; and

writing presentation time information to the start code table;

wherein the start code table comprises a plurality of data words and wherein writing one or more start codes further comprises writing a plurality of start codes to a particular one of the plurality of data words in the start code table.

20. The article of manufacture of claim 19, wherein the presentation time information comprises a presentation time stamp.

21. The article of manufacture of claim 19, wherein the plurality of instructions further comprises instructions for writing decoding time information to the start code table.

22. The article of manufacture of claim 21, wherein the decoding time information comprises a decoding time stamp.

23. (Cancelled)

24. The article of manufacture of claim 23, wherein the plurality of start codes comprises a slice start code and a non-slice start code.

25. The article of manufacture of claim 24, wherein the plurality of instructions further comprises instructions for:

writing a command to the start code table.

26. The article of manufacture of claim 25, wherein the plurality of instructions further comprises instructions for:

writing a reference clock offset to the start code table.

27. The article of manufacturer of claim 26, wherein the command and the reference clock offset are written to another particular one of the plurality of data words.

28. The circuit of claim 10, wherein the plurality of start codes written to the particular data word comprise a start code for a slice group and a start code for a picture.

EVIDENCE APPENDIX

There are no pages in this section.

RELATED PROCEEDINGS APPENDIX

There are no pages in this section